

# Boosting Business Activity of Supply Chain for Construction Companies

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**Abstract-** Boosting the business activity of the supply chain for construction companies is an important business problem for each state, as it provides accommodation for the population. This problem is particularly acute in countries that are experiencing an economic crisis, such as Russia. This article assesses the business activity of the supply chain for construction companies based on turnover indicators (2015-2017), as well as analyzing the company's liquidity to introduce areas to promote supply chain activity. For example, we took into consideration the economic indices registered in Snabstroy LLC, which specializes in deliverables for the installation of windows and doors. As a result, this document shows that a crisis has led to a decline in the business activities of the supply chain for construction companies. Russian state programs have succeeded in stopping businesses, but remain at a significantly lower level than the pre-crisis period. In this regard, this article introduces original recommendations on the increase in the business activity of the supply chain for construction companies.

**Key words-** boosting, supply chain, turnover, business activity, construction companies, management.

## 1. Introduction

Maintaining economic stability is one of the major problems faced by the company nowadays [1], [2], [3]. At present, there is an unfavorable financial environment developed under the influence of many foreign policy/business factors in Russia. In this regard, financial stability assessment becomes a priority for all enterprises, because it allows assessing the ability of enterprises to fulfill their obligations to personnel, counterparties and state

with due account for current incomes and expenses [4], [5], [6]. This is an opportunity for the company to assess its own risks and make timely decisions on adjusting its development strategy [7], [8]. Besides, the company's business activity of supply chain analysis should be an important element of monitoring its financial activity.

Since there are economic difficulties, a number of steps were taken to boost the business activity of supply chain for construction companies [9], [10], [11]:

- Establishing a special sectorial management body – the Ministry of Construction, Housing, and Utilities of the Russian Federation [12]. Previously, there was no need for such a body, as it was expected that self-management tools and market mechanisms would meet the case;
- Completing state orders under the Federal contract system. This is another sign of increasing the state role in the field of supply chain and business activity.
- Changing the management model of capital-intensive industries and supporting the major construction projects.

These programs will be assessed in terms of efficiency on the basis of economic indices recorded by the construction company called Snabstroy LLC in 2015-2016. Thus, the purpose of this research is to introduce proposals for boosting business activity of supply chain for construction companies.

Research object is the financial and business activities of Snabstroy LLC, which specializes in the deliverables for professional window and door installation. Over the years, almost 90% of companies operating in this sector were covered by the firm. Currently, its share in total sales is about

45%.

## 2. Data, Analysis, and Results

Based on the Snabstroy's balance sheet and financial report for 2015-2016, we will analyze the basic economic indices [12], [13] presented in Table 1.

Based on Table 1, the following conclusions can be drawn. The company's net profit is unstable in

terms of dynamics during the research periods: in 2016, there was a sharp increase by RUB 6524 thousand rubles versus the amount earned in 2016 (123.6 rate per cent). In 2017, there was a decrease by 2.6%. In general, this is explained by the intermittent growth of sales revenue and production costs.

**Table 1.** Basic Economic Indices of the Snabstroy LLC

Indicator	2015	2016	2017	Changes			
				Absolute		Growth rate, %	
				2016	2017	2016	2017
Sales (service) revenue, RUB thousand	27044	38101	40854	11057	2753	40.9	7.2
Sales profit, RUB thousand	9274	16511	14754	7237	-1757	78.0	-10.6
Net profit, RUB thousand	5278	11802	11499	6524	-303	123.6	-2.6
Profit margin, %	34.29	43.33	36.11	9.04	-7.22	26.4	-16.7
Return on equity, %	50.68	85.79	75.54	35.11	-10.25	69.3	-11.9

Due to an increase in settlements with customers by RUB 5041 thousand (36.13%) and other short-term receivables by RUB 344 thousand (22.81%). In 2015, the amount of short-term payable was RUB 1890 thousand. It increased by RUB 495 thousand (35.48%) compared to 2015 due to an increase in debt to suppliers/contractors by RUB 403 thousand

(37.07%) and received advances by RUB 169 thousand (111.92%). In 2015, the amount of tax/contribution debt decreased by RUB 25 thousand (78.13%) while the amount of other short-term payables decreased by RUB 52 thousand (41.6%). The values for receivable and payable turnover ratios of the Snabstroy LLC are presented in Table 3 [16], [17], [18].

**Table 2.** Accounts receivables: composition and structure (Snabstroy LLC)

Composition	2015		2016		2017		Changes in 2015 vs 2014, RUB thousand	Growth rate in 2015 vs 2014 %
	RUB thousand	Share, %	RUB thousand	Share, %	RUB thousand	Share, %		
Short-terms receivables, including:	10942	100	16724	100	22315	100	5591	33.43
Settlements with customers	8486	77.6	13951	83.4	18992	85.1	5041	36.13
Advance paid out	2001	18.3	1265	7.6	1471	6.6	206	16.28
Other short-term receivables	455	4.2	1508	9.0	1852	8.3	344	22.81
Short-terms payables, including:	1269	100.0	1395	100.0	1890	100.0	495	35.48
Settlements with suppliers	1041	82.0	1087	77.9	1490	78.8	403	37.07
Advance paid out	47	3.7	151	10.8	320	16.9	169	111.92
Tax/contribution calculation	52	4.1	32	2.3	7	0.4	-25	-78.13
Other short-term payables	129	10.2	125	9.0	73	3.9	-52	-41.6

Accounts receivable turnover ratio has quite low values throughout the analyzed period – from 2 to 3 turns. Thus, repayment period is 120-180 days. Account payable turnover ratio fell by 4 turns. This may indicate problems with bill payment. At the same time, unpaid debt can be used by the company as a free source of financing for current activity.

Table 3 shows that receivables exceed payables both in 2015 and in 2017 by 8.6 times and 12 times, respectively. This indicates commerce resource withdrawal [19], [15].

**Table 3.** Business activity of supply chain indices (Snabstroy LLC)

Indicators	2015	2016	Absolute deviation	Growth rate, %
Turnover Ratio, turn	3	2	-1	-33.3
Days Sales Outstanding, day	120	180	60	50.0
Turnover Ratio	29	25	-4	-13.8

Days Payables Outstanding, day	12	14	2	16.7
Receivables-to-Payables	8.6	12.0	11.8	3.2
Ratio				

### 3. Discussion

The construction company looking forward to increase their process utilization rates should undertake measures to adapt to the situation coming about. In this case, the following business factors that require priority accounting are proposed [9]:

-construction categories are the basic characteristic property of the cycle. At each turn of the business cycle, there is a specific type of activity. The company's ability to meet the demand for the most relevant construction products predetermines the increase in the number of orders received;

-Basic resources (human, material, financial, etc.) availability and major resource supply imbalances also determine the company's capabilities. Each cyclical phase should assess resources provision potential by types, as well as forecast and plan activities in terms of this aspect;

-Supporting building activities with science, keeping track of building technologies, methods for manufacturing building materials, their application, etc. are prerequisites for analytics when it comes to specific cyclical phases and business adaptation.

Generally, we agree with the author [20], however, his proposals can lead to the situation, when the company becomes region-specific in operation without the ability to develop in a different business environment.

Deeper state support is required if one wishes to boost business activity of supply in the context of crisis [21].

### 4. Conclusion

The company's business activity of supply chain analysis has shown that Snabstroy LLC has low business activity of supply chain now. This slows down the asset turnover and increases the risk of financial stability loss in the future. Excessive receivables growth requires attracting external loans in order to maintain current activities. This will, eventually, lead to company's financial dependence and reduced liquidity.

The following measures are required for boosting business activity of the supply chain:

-Reducing receivables by means of strict control over the settlements with customers, changes in credit policy and bad debt reserve creation;

-Reducing the amount of short-term and long-term liabilities by money received as repayment of receivables.

### References

- [1] Adnan, M.A., and Humayon A.D. "Predicting corporate bankruptcy: where we stand?" Corporate governance, Vol 6, No. 1, p. 3, 2006.
- [2] Kudrin, A., and Gurvich, E. "A new growth model for the Russian economy", Russian journal of economics, Vol 1, No.1, pp. 30-54, 2015.
- [3] Liao, Q., and Mehdiann, S. "Financial Distress and Predicting Corporate Bankruptcy: An Index Approach". Review of Economic and Business Studies, Vol 9, No. 1, pp. 33-51, 2016.
- [4] Frenkel, A., Sergienko, Y., Tikhomirov, B., and Roshina, L. "The Russian economy under the circumstances of crisis". Economic Policy, Vol 4, pp. 113-155, 2015.
- [5] Frenkel, A.A., Sergienko, Y.I., "Tikhomirov, B.V., and L.S. Roshchina. The Russian Economy in 2015-2017", Economic Policy, Vol 5, pp. 198-233, 2016.
- [6] Silka, D.N. "On priority measures for creating the basis for the development of the russian economy". Life Science Journal, Vol 11, No. 7, pp. 310-313, 2014.
- [7] Holland, S.R. *Economic Powers That Be: US-Russo Political Actions and Their Affect on the Russian Economy*, 2015,
- [8] <http://digitalcommons.liberty.edu/cgi/viewcontent.cgi?article=1532&context=honors>.
- [9] Bhandari, N.C. "Trade Equilibrium: A Multi-Generational Economic Policy", Journal of International Business Research, Vol 13, No. 1, pp. 92, 2014.
- [10] Pleskachev, Y., and Ponomarev, Y. "Import Price Rigidity and Invoice Currency in Russia". Economic Policy, Vol 3, pp. 80-99, 2017.
- [11] Seleznev, A.Z., Chapluk, V.Z., Sayrenko, T.N., Sorokina, L.N., Pertovskaya, M.V. and Alekseenko, E.A. "Regulation of the Debt

- Sustainability of the Russian Economy*". International Journal of Environmental & Science Education, Vol 11, No. 17, 2016.
- [12] Ye, M. "Some aspects of the import substitution policy, adapted to the modern level of development of the Russian economy". Economy and Entrepreneurship, Vol 11, pp. 113-116, 2015.
- [13] O'Brien, J., and Marakas, G. *Introduction to Information Systems*. 16th ed, Irwin, McGraw-Hill, pp. 768, 2012.
- [14] Yuldasheva, L.F. "Assessing the enterprise's financial status according to the balance sheet data". International academic bulletin, Vol 4, pp. 63 – 65, 2014.
- [15] Brealey, M. *Principles of Corporate Finance*. Seventh Edition. The McGraw-Hill Companies, pp. 1062, 2003.
- [16] Drozhdinina, A.I., Mukhomedzyanova, E.V., Skotarenko, O.V. *Accounting and analysis in a commercial organization: textbook*. Russian Academy of Natural History, Moscow, pp. 369, 2012.
- [17] Skotarenko, O.V., Bepalova S.V. *Analyzing of operations carried out by a commercial organization: textbook*. St. Petersburg Academic University, pp. 152, 2016.
- [18] Brigham E.F., and Houston, J.F. *Fundamentals of financial management*, pp. 755, 2009.  
<https://drive.google.com/file/d/0BxtxrMvV5e9Vb2pNbEo0S2hNckU/view>.
- [19] Volosevich, N.V. "Methodological approaches in the assessment of commercial organizations". Theory and practice of social development, Vol 16, pp. 98 – 102, 2014.
- [20] Boer, P., Brouwers, M.P., and Koetzier. W. *Basics of Financial Management*, pp. 404, 2009,
- [21] [http://www.noordhoffuitgevers.nl/nuweb/assets/Inhoudsopgave\\_9789001802912.pdf](http://www.noordhoffuitgevers.nl/nuweb/assets/Inhoudsopgave_9789001802912.pdf).
- [22] Silka, D.N. "Principles of adapting construction companies to dynamic characteristics of business activity". Vestnik Universiteta (State University of Management), Vol 9, No. 86, 2013.
- [23] Dorothea, M., Ashley, C., and Poultney, C. "Boosting local inputs into the supply chain, Business Implementation of Pro Poor Tourism: Case Study Briefs", pp. 3, 2004.